

PTO/SB/80 (11-04)  
Approved for use through 11/30/2005. OMB 0651-0035  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
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## POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

☒ Practitioners associated with the Customer Number: 22428

OR

☐ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

☒ The address associated with Customer Number:

22428

OR

<input type="checkbox"/> Firm or Individual Name			
Address			
City	State	Zip	
Country			
Telephone			Fax

Assignee Name and Address:

California Institute of Technology  
1201 East California Boulevard  
Pasadena, California 91125  
United States of America

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

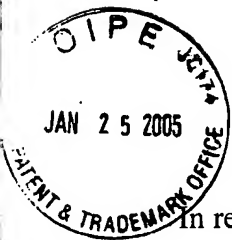
### SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	29 December 2004
Name	Adam Cochran	Telephone	626-395-4567
Title	Intellectual Property Counsel, California Institute of Technology		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



TFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 049411-0248

In re patent application of Yu-Chong TAI, et al.

Group Art Unit: 1753

Serial No. 10/603,573

Examiner: Not Yet Known

Filed: June 24, 2003

For: Microfluidic Devices And Methods With  
Electrochemically Actuated Sample Processing

**CERTIFICATE UNDER 37 C.F.R. §3.73(b)**

We, **California Institute of Technology**, a corporation of the state of California, together with **City of Hope**, a non-profit public benefit corporation of the state of California, certify that we are the assignees of the entire right, title and interest in the patent application identified above by virtue of either:

- A. ☒ An assignment from inventors **Yu-Chong TAI**, **Jun XIE**, and **Qing HE**, of the patent application identified above, for which a copy thereof is attached.
- OR
- B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. Assignment

From:

To:

The assignment document was recorded in the Patent and Trademark Office at Reel\_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. Assignment

From:

To:

The assignment document is being filed for recordation in the Patent and Trademark Office concurrently with this Certificate Under 37 C.F.R. § 3.73(b). A copy of this document and the recordation sheet is attached.

Serial No. 10/603,573

Attorney Docket No. 049411-0248

3. Merger/Change of Name

From:

To:

The merger/change of name document is being filed for recordation in the Patent and Trademark Office concurrently with this Certificate Under 37 C.F.R. § 3.73(b). A copy of this document and the recordation sheet is attached.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:

January 25, 2008

Name: Stephen B. Maebius, Reg. No. 35,264

Title: Attorney for Applicant

Signature:

Stephen B. Maebius (40,153)

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Yu-Chong Tai of 3191 East California Blvd., Pasadena, CA 91107; Jun Xie of 1036 East Del Mar Blvd., Apt. 101, Pasadena, CA 91106; and Qing He of 1001 East Villa St., Apt. #8, Pasadena, CA 91106; CA 91773, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: MICROFLUIDIC DEVICES AND METHODS WITH  
ELECTROCHEMICALLY ACTUATED SAMPLE  
PROCESSING

Filing Date: June 24, 2003

Application No.: 10/603,573; and

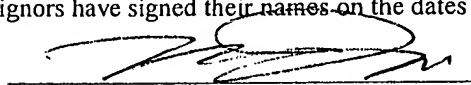
WHEREAS, California Institute of Technology, a university, located at 1200 E. California Blvd., Pasadena, California 91125, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: 1/22/04

  
Yu-Chong Tai

Dated: 01/21/04

  
Jun Xie

Dated: 01/21/04

  
Qing He

COPY



PTO/SB/81 (11-04)

Approved for use through 11/30/2005. OMB 0651-0035

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**POWER OF ATTORNEY  
and  
CORRESPONDENCE ADDRESS  
INDICATION FORM**

Application Number	10/603,573
Filing Date	June 24, 2003
First Named Inventor	Yu-Chong TAI
Title	Microfluidic Devices and . . .
Art Unit	1753
Examiner Name	Not Yet Known
Attorney Docket Number	049411-0248

I hereby revoke all previous powers of attorney given in the above-identified application.

I hereby appoint:

☒ Practitioners associated with the Customer Number:

22428

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☒ The address associated with the above-mentioned Customer Number:

OR

☐ The address associated with Customer Number:

OR

<input type="checkbox"/> Firm or Individual Name			
Address			
City	State	Zip	
Country			
Telephone	Fax		

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

**SIGNATURE of Applicant or Assignee of Record**

Signature		Date	1/21/03
Name	Larry A. Couture, Ph.D.	Telephone	626-256-8728
Title and Company	Senior Vice President, Center for Applied Technology Development		

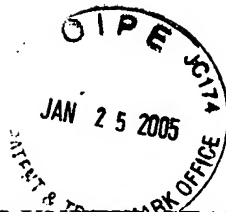
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

COPY



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 049411-0248

In re patent application of Yu-Chong TAI, et al.

Group Art Unit: 1753

Serial No. 10/603,573

Examiner: Not Yet Known

Filed: June 24, 2003

For: Microfluidic Devices And Methods With  
Electrochemically Actuated Sample Processing

**CERTIFICATE UNDER 37 C.F.R. §3.73(b)**

We, **City of Hope**, a non-profit public benefit corporation of the state of California, together with California Institute of Technology, a corporation of the state of California, certify that we are the assignees of the entire right, title and interest in the patent application identified above by virtue of either:

A. ☒ An assignment from inventor **Terry D. LEE** of the patent application identified above, for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. Assignment

From:

To:

The assignment document was recorded in the Patent and Trademark Office at Reel\_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. Assignment

From:

To:

The assignment document is being filed for recordation in the Patent and Trademark Office concurrently with this Certificate Under 37 C.F.R. § 3.73(b). A copy of this document and the recordation sheet is attached.

Serial No. 10/603,573  
Attorney Docket No. 049411-0248

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To:

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☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:

Name: Larry A. Couture, Ph.D.

Title: Sr. Vice President, Center for Applied Technology Development

Signature: \_\_\_\_\_

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Terry Dwight Lee of 641 Cottonwood Lane, San Dimas, CA 91773, hereinafter referred to as "Assignor," is one of the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: MICROFLUIDIC DEVICES AND METHODS WITH  
ELECTROCHEMICALLY ACTUATED SAMPLE  
PROCESSING

Filing Date: June 24, 2003

Application No.: 10/603,573; and

WHEREAS, CITY OF HOPE, a non-profit public benefit corporation of the State of California, with a place of business at 1500 East Duarte Road, Duarte, California 91010-0269 hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignor had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees that he will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has signed his name on the date indicated.

Dated: 26 Jun 04

60107239 v1

  
Terry Dwight Lee